L	Hits	Search T xt	DB	Tim stamp
Number 1	26	parson n ar2 nich las	USPAT;	2003/09/24
•	26	parson ii aiz iiicii ias	US-PGPUB;	11:32
			EPO; JPO;	11.52
			DERWENT	
^	3	ollard noor? borns	USPAT:	2003/09/24
2	3	ellard near2 barry	US-PGPUB;	11:32
			EPO; JPO;	11.32
			DERWENT	
_				2003/09/24
3	11	marshall near2 graeme	USPAT;	11:32
			US-PGPUB;	11:32
		_	EPO; JPO;	
			DERWENT	0000/00/04
4	34	(parson near2 nicholas) (ellard near2 barry)	USPAT;	2003/09/24
		(marshall near2 graeme)	US-PGPUB;	11:32
			EPO; JPO;	
			DERWENT	
5	4012214	aluminum Al	USPAT;	2003/09/24
			US-PGPUB;	11:33
			EPO; JPO;	
		·	DERWENT	
6	18	((parson near2 nicholas) (ellard near2 barry)	USPAT;	2003/09/24
		(marshall near2 graeme)) and (aluminum Al)	US-PGPUB;	11:44
			EPO; JPO;	
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7	12841	(aluminum Al) near2 (alloy base based	USPAT;	2003/09/24
		remaining remain balanced balancing rest)	US-PGPUB;	11:46
		and (extruding extruded)	EPO; JPO;	Ì
			DERWENT	
8	57001	(aluminum Al) same (silicon Si) same	USPAT;	2003/09/24
		(magnesium Mg)	US-PGPUB;	11:47
			EPO; JPO;	
			DERWENT	
9	636	((aluminum Al) same (silicon Si) same	USPAT;	2003/09/24
		(magnesium Mg)) and (etching etched etch)	US-PGPUB;	11:48
		and (anodized anodised anodising anodizing)	EPO; JPO;	
		,	DERWENT	
10	79	((aluminum Al) same (silicon Si) same	USPAT;	2003/09/24
		(magnesium Mg)) and (etching etched etch)	US-PGPUB;	11:49
		and (anodized anodised anodising anodizing)	EPO; JPO;	
		and (aging aged ageing)	DERWENT	
11	3	(US-6565679-\$ or US-6440359-\$).did. or	USPAT;	2003/09/24
		(US-20030150532-\$).did.	US-PGPUB	11:50

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## (FILE 'HOME' ENTERED AT 11:29:16 ON 24 SEP 2003)

## FILE 'HCAPLUS' ENTERED AT 11:29:23 ON 24 SEP 2003 E JP06336682/PN

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L2	192789	(AL OR	ALUMINUM)	(2A) (ALLOY	OR	REMAIN?	OR	BALANCE?	OR	BASE?	OR	R
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Examiner's Cor

AN 1986:428454 CAPLUS

DN 105:28454

TI Surface treatment of aluminum and aluminum alloys

IN Hata, Tadahiro

PA Tateyama Aluminium Kogyo K. K., Japan

SO Jpn. Kokai Tokkyo Koho, 4 pp.

CODEN: JKXXAF

DT Patent

LA Japanese

FAN.CNT 1

FAN.	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PΙ	JP 61030684	<b>A</b> 2	19860212	JP 84-150329	19840719
	JP 03056320	В4	19910827		

AB Al or Al alloys are etched in aq. NaOH contg. Zn, washed with water, desmutted, and then electrolyzed in an aq. soln. contg. Cl. A fine matte finish is obtained by only a little electricity consumption. Thus, 6063S-T5 (extruded material) was degreased, washed with water, etched by dipping 10 min in 40.degree. soln. contg. 50 g NaOH/L and 10 ppm Zn, washed with water, and then dipped 5 min in a std. temp. bath contg. 100 g H2SO4/L for desmutting. This was anodized 5 min at 20.degree. and 0.3 A/dm2 in pH 1.5 H2SO4 bath contg. 100 ppm Cl(NaCl) to give a gray matte finish.

AN 1995:408551 HCAPLUS

DN 122:167679

TI Manufacture of aluminum alloy materials having grain pattern

IN Takai, Toshihiro

PA Tateyama Aluminum Kogyo Kk, Japan

SO Jpn. Kokai Tokkyo Koho, 9 pp.

CODEN: JKXXAF

DT Patent

LA Japanese

FAN.CNT 1

ΡI

PATENT NO. KIND DATE APPLICATION NO. DATE

JP 06336682 A2 19941206 JP 1994-61220 19940330 <--

PRAI JP 1993-73214 19930331

AB Al-Mg-Si base alloys contg. <0.05% Fe and 0.05-0.3% Cu are extruded and etched to obtain Al alloy materials having grain pattern preferably from grains of av. size 1.0-2.0 mm for building materials, etc. Optionally the Al alloy materials are further anodized, colored, and coated with paint.

123:176745 HCA AN

Corrosion-resistant aluminum alloys ΤI

IN

PA

Kobori, Kazuhiro; Iwai, Ichiro Showa Aluminium Co Ltd, Japan Jpn. Kokai Tokkyo Koho, 3 pp. so CODEN: JKXXAF

DTPatent

LΆ Japanese

FAN.CNT 1

PATENT NO. KIND DATE APPLICATION NO. DATE JP 07126784 JP 93-279767

ΡI A2 19950516

The Al alloys contain Mg 0.2.-1.0, Si 0.4-1.5, Ti 0.05-0.3, Cu .ltoreq.0.05, and optionally Mn 0.05-0.2, Fe 0.05-0.35, and/or Cr .ltoreq.0.05%. The Al alloys are useful for hulls of ships.

95:11214 HCA

Type A-GS aluminum alloy with high mechanical strength and toughness

Societe de Vente de l'Aluminium Pechiney, Fr.; Cegedur Societe de Transformation de l'Aluminium Pechiney

SO Fr. Demande, 6 pp. CODEN: FRXXBL

DΨ Patent

French LΑ

FAN.CNT 1 PATENT NO. KIND DATE

APPLICATION NO. DATE -----ΡI FR 2446865 19800814 A1 · FR 79-1450 19790116 FR 2446865 B1 19821203

AR The strength and ductility of Al alloys of the A-GS type is improved for use in wire products. The alloy contains si 0.3-0.6, Fe <0.35, Cu <0.3, Mn <0.3, Cr <0.20 (with 0.08% .ltoreq. Mn + 2Cr .ltoreq. 0.40), Mg 0.40-0.75, Ti <0.1, Zr <0.1, and other elements  $0.15\frac{1}{8}$ . The alloy is heat treated in the T5 condition for tensile strength of .apprx.260 MPa. The Charpy V-notch toughness is .gtoreq.1.5 times that of classical A-GS at similar strength. The radius of crack-free bending to 180.degree. is .ltoreq.0.65 of that of A-GS, at equal and comparable strength. Thus, alloy [77807-62-6] contg. Fe 0.19, Si 0.47, Mg 0.54, Cu 0.11, Mn 0.12, Cr 0.06, and Ti 0.012% had tensile strength of 273 MPa, and toughness of 33 J/cm2.

96:185941 HCA

ΤI Die-cast aluminum alloy

PA

Ryobi, Ltd., Japan Jpn. Kokai Tokkyo Koho, 3 pp. so CODEN: JKXXAF

DTPatent

LΑ Japanese

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PΙ	JP 57002857	A2	19820108	JP 80-78115	19800609
	JP 61036063	В4	19860816		

Scrap from 6063 Al alloy [11121-92-9] sash prodn. contg. Cu .ltoreq.0.10, Si 0.20-0.6, Fe AB .ltoreq.0.35, Mn .ltoreq.0.10, Mg 0.45-0.9, Zn, Cr, Ti .ltoreq.0.1, and other impurities .ltoreq.0.15%, is melted and added with Fe and Ti to contain Fe 0.6-1.5 and Ti 0.06-0.15%. It is readily die-cast and anodized to be silver white and corrosion-resistant.

- AN 105:10442 HCA
- Aluminum alloys coated with amorphous silicon for photosensitive drums
- Asano, Kazuhiko; Ochi, Kenichiro; Tsuji, Yoshihiro; Katayama, Satoru IN
- PA
- Kobe Steel, Ltd.; Japan Jpn. Kokai Tokkyo Koho, 3 pp. CODEN: JKXXAF
- DT Patent
- LΑ Japanese
- FAN.CNT 1

1111	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
ΡI	JP 60262937	A2	19851226	JP 84-119436	19840611
	JP 62032258	В4	19870714		

Al alloys for photosensitive drums contain Si 0.2-1.0, Mg 0.1-1.5, Zn 0.05-1.0, Fe .ltoreq.0.35, Mn .ltoreq.0.10, and Cr .ltoreq.0.10%. Polished surface is suitable for coating by vacuum evapn. of amorphous Si. Thus, Al-alloy ingot (contg. Mg 0.55, Si 0.35, Fe 0.10, and Zn 0.28%) was soaked 4 h at 520.degree., extruded into a pipe, and polished to surface roughness 0.03.mu.. Amorphous Si evapd. on the surface showed a high resistance to peeling.

Examiner's Com

1986:428454 CAPLUS AN

105:28454 DN

Surface treatment of aluminum and aluminum alloys ΤI

Hata, Tadahiro IN

Tateyama Aluminium Kogyo K. K., Japan PΑ

Jpn. Kokai Tokkyo Koho, 4 pp. so CODEN: JKXXAF

DTPatent

LA Japanese FAN.CNT 1

ΡI

N.CNT I								
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE				
JP 61030684	A2	19860212	JP 84-150329	19840719				
JP 03056320	В4	19910827						

Al or Al alloys are etched in aq. NaOH contg. Zn, washed with water, AΒ desmutted, and then electrolyzed in an aq. soln. contg. Cl. A fine matte finish is obtained by only a little electricity consumption. Thus, 6063S-T5 (extruded material) was degreased, washed with water, etched by dipping 10 min in 40.degree. soln. contg. 50 g NaOH/L and 10 ppm Zn, washed with water, and then dipped 5 min in a std. temp. bath contg. 100 g H2SO4/L for desmutting. This was anodized 5 min at 20.degree. and 0.3 A/dm2 in pH 1.5 H2SO4 bath contg. 100 ppm Cl(NaCl) to give a gray matte finish.

AN 122:15090 HCA

ΤI Manufacture of aluminum wheels by forging and aging

IN Nagata, Tatsuo; Takahashi, Wataru

PA Sumitomo Metal Ind, Japan

so Jpn. Kokai Tokkyo Koho, 7 pp.

CODEN: JKXXAF DTPatent

LΑ Japanese FAN.CNT 1

PATENT NO.

KIND DATE

APPLICATION NO.

DATE

PΙ JP 06248401 A2 19940906 JP 93-61307

19930226

The Al-alloy blanks (contg. Mg 0.3-1.5, Si 0.2-1.2, Fe .ltoreq.0.7, Cu .ltoreq.0.4, Cr .ltoreq.0.4, Mn .ltoreq.0.2, and Zn .ltoreq.0.8%) are pretreated by soln. heat treatment, and forged at 150-300.degree. and .gtoreq.10% draft, followed by aging the wheel rim products for increased strength.

105:177169 HCA AN

ΤI Aluminum alloy ingot for rolling

Takagi, Kunitoshi; Kimura, Makoto IN

SKY Aluminium Co., Ltd., Japan Jpn. Kokai Tokkyo Koho, 4 pp. SO CODEN: JKXXAF

DTPatent

LΑ Japanese

FAN.CNT 1

PATENT NO. KIND DATE APPLICATION NO. DATE JP 61104044 **A**2 19860522 JP 84-222594 19841023 JP 02025972 В4 19900606

The  ${\bf Al}$  alloy ingot contains  ${\bf Fe}$  and Si 0.05-1.0 each with Fe/Si ratio 3.0-7.0, Mg 0.3-1.5, Cu 0.01-0.5, Ti 0.005-0.3, and Cr and Mn 0.05-0.3% each. The ingot microstructure has dendrite arm spacing .ltoreq.30.mu. at 20 mm depth. No dendritic pattern is obsd. after rolling and anodizing. Thus, typical Al alloy contained Fe 0.47-0.48, Si 0.11, Mg

0.76-0,80, Cr 0.07, Cu 0.05, Ti 0.01, and Mn 0.01-0.02%.



107:221690 HCA

TI Aluminum-based alloys

PA Swiss Aluminium Ltd., Switz.

Belg., 7 pp. CODEN: BEXXAL so

 $\mathtt{DT}$ Patent

LA French

FAN.CNT 1

ΡI

PATENT NO. KIND DATE APPLICATION NO. DATE \_\_\_\_\_ -----BE 906107 A1 19870416 BE 86-217650 19861230

The Al alloys contain Mg 0.3-1.0, Si 0.3-1.2, Fe 0.1-0.5, V 0.05-0.20, Cu .ltoreq.0.4%, and Mn .ltoreq. (0.25-0.5) x %Fe. The alloys are used for laminating. Thus, annealed alloy contg. Cu 0.17, Fe 0.19, Mg 0.51, Mn 0.06, Si 0.39, and V 0.08% showed better than 2.266,0 in the contact of females and better than 2.266,0 in the contact of females and better than 2.266,0 in the contact of females and better than 2.266,0 in the contact of females and better the contact of the contact of

better than AA6060 in terms of forging and bending properties.

120:60336 HCA AN

ΤI Aluminum alloys for heat-exchange fins

IN Doko, Takenobu

PA

Furukawa Aluminium, Japan Jpn. Kokai Tokkyo Koho, 9 pp. so CODEN: JKXXAF

DT Patent

LΑ Japanese

FAN.CNT 1

PATENT NO. KIND DATE APPLICATION NO. ΡI JP 05263172 A2 19931012 JP 92-91785 19920317

The Al alloys contain Si 0.05-1.1, Fe 0.05-1.1, and Zr 0.03-0.3%, and are reheated at 400-500.degree. for 10 min to 30 h after brazing. Optionally, the Al alloys contain Cu .ltoreq.0.5, Mg .ltoreq.1.0, Cr .ltoreq.0.3, Mn .ltoreq.0.09, and/or Ti .ltoreq.0.3, and/or Zn .ltoreq.2.5, In .ltoreq.0.3, and/or Sn .ltoreq.0.3%.

122:139979 HCA AN

Manufacture of aluminum-magnesium-silicon based alloy plates with excellent heat-hardenability

Kishino, Kunihiko; Sasaki, Katsutoshi; Watanabe, Hajime Furukawa Aluminium, Japan; Kawasaki Steel Co

PA

Jpn. Kokai Tokkyo Koho, 5 pp. CODEN: JKXXAF

DΤ Patent

LA Japanese

FAN.CNT 1

PATENT NO. KIND DATE APPLICATION NO. DATE \_\_\_\_ JP 06272001 **A**2 19940927 JP 93-85479

PΙ 19930319 Al alloy ingots contg. Mg 0.2-2, Si AB 0.2-2, and .gtoreq.1 of Fe .ltoreq.2, Cu .ltoreq.2, Zn .ltoreq.3, Mn .ltoreq.2, Cr .ltoreq.0.5, Zr .ltoreq.0.3, Ti .ltoreq.0.2, B .ltoreq.0.1, and Be .ltoreq.0.05% are (1) homogenized by heating to .gtoreq.480.degree., or homogenized and heated to .gtoreq.480.degree. during hot rolling, (2) hot rolled under conditions of passing 360-450.degree. within <15 min and finish temp. .ltoreq.360.degree., (3) cold rolled, with optional intermediate annealing, and (4) soln. treated for .gtoreq.10 s at .gtoreq.500.degree.. The plates are useful for automobiles, elec. appliances, etc.

123:15554 HCA

Manufacture of aluminum alloy sheets for panel forming

ΙN O. Heiryu; Suzuki, Juichi

Furukawa Electric Co Ltd, Japan; Kawasaki Steel Co

Jpn. Kokai Tokkyo Koho, 10 pp. CODEN: JKXXAF

DTPatent

LΑ Japanese

FAN.CNT 1 PATENT NO.

KIND DATE

APPLICATION NO.

ΡI JP 07018390 A2 19950120

JP 93-191786

19930705

The age-hardening sheets are manufd. from the Al alloys AΒ contg. Si 0.3-1.7, Cu 0.01-1.2, Mn 0.01-1.1, Mg 0.4-1.4, Fe .ltoreq.1.0, and optionally Cr 0.04-0.4, Zn .ltoreq.0.25, Zr .ltoreq.0.4, and/or Ti .ltoreq.0.2 wt.%. The Al-alloy ingot is hot rolled and then cold rolled, and the sheets are soln. treated at .gtoreq.450.degree. but below the solidus temp., quenched, and aged with adjusting the content of pptd.

intermetallic compd. to 0.01-0.1 vol.% by controlling the quenching and low-temp. aging. The Al-alloy sheets are useful for

manuf. of automobile body panels.

JP359031892A, Feb. 21, 1984, SURFACE TREATMENT OF EXTRUDED ALUMINUM MATERIAL; HARADA, HIDEHIKO, et al., INT-CL: C25D11/18; C25D11/16

## ABSTRACT:

PURPOSE: To provide a deep color tone to an extruded Al material by a matte surface and a composite color, by blasting the surface of the material, forming a colored alumite film, coating the film with paint which is different from the film in color, and wiping off part of the paint film. CONSTITUTION: The surface of an extruded Al section is decorated with a desired matte pattern by spraying hard fine grains, and a colored alumite film is formed by anodic oxidation or other method. The surface of the film is coated with paint which is different from the film in color, and part of the paint film (protrusions of the matte surface) is wiped off. By this method a deep surface finish giving a pattern of a composite color is attained.